



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/581,284

10/23/2006

Per Aberg

1304-7

3128

28249 7590 03/24/2008

DILWORTH & BARRESE, LLP  
333 EARLE OVINGTON BLVD.  
SUITE 702  
UNIONDALE, NY 11553

EXAMINER

SHAW, CLIFFORD C

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

03/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/581,284	ABERG, PER	
	<b>Examiner</b>	<b>Art Unit</b>	
	Clifford C. Shaw	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06-02-2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

**Detailed Action**

1.) On the form PTO-1449 attached to the “Information Disclosure Statement” filed on 6/2/2006, applicant lists patent no. 6615259. Applicant is advised that this patent has been marked through as “not considered by examiner” because the patent number does not correspond to the patent date and inventor as presented on the PTO-1449. Applicant apparently intended to cite patent no. 6,515,259. Patent no. 6,515,259 has been cited on the form PTO-892 attached hereto.

2.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.) Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In method claim 1, it is not clear what method steps are being claimed, especially in lines 3-5 and in the last two lines. In apparatus claims 3 and 11, it is not clear what structural limitation is being claimed by the respective language “... means for carrying out the welding method as claimed in claim 1” (claim 3) and “... means for carrying out the welding method as claimed in claim 2” (claim 11) and it is not clear how the aforementioned “means” cooperates with the other elements of each of claim 3 or 11. In claims 18 and 19, it is not clear what is meant by “additionally comprising” when no structural limitations have been set forth where this language appears. In claims 14-20, it is not clear what is meant by “special support”

in terms of a structural limitation. The other claims are inadequate under 35USC112 in that they depend from inadequate claims.

4.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.) Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. (5,416,299) taken with Innami et al. (5,834,732). Figures 1 and 2(b) and the discussion thereof in columns 9-11 of the patent to Tabata et al. (5,416,299) disclose a method and power source for gas metal arc welding wherein the process is controlled to alternate cyclically between short arc welding and pulse welding. The claims differ in specifying that during the pulse welding there is a droplet separation of one droplet per pulse and further in specifying in dependent claims certain time durations associated with the process. These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious that the pulses in figure 2(b) of Tabata et al. (5,416,299) transferred one droplet per pulse in view of the teachings of Innami et al. (5,834,732) that such a regimen is useful in pulse arc welding (see figure 10 in Innami et al. (5,834,732) and the discussion thereof). In regard to the timing values set forth in the dependent claims, it would have been obvious to have adjusted the parameters of the combination for an optimal result for different welding problems, which adjustment could have obviously resulted in the timing values claimed.

6.) Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. (5,416,299) taken with Innami et al. (5,834,732) as applied to claims 1-15, further taken with Niedereder et al. (7,220,941). The only aspect of the claims to which the rejection above does not apply is the provision for a control box. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have implemented the control for the power supply in Tabata et al. (5,416,299) in any conventional manner. In particular, it would have been obvious to have used a control box as claimed, the reason being the teachings of Niedereder et al. (7,220,941) that it is useful to use a control box for controlling a power supply (see element 27 in figures 1 and 2 and the discussion thereof in Niedereder et al. (7,220,941)).

7.) Patent no. 6,515,259 is cited to correct a typographical error in the IDS filed on 6/2/2006 (see paragraph 1 above). The Japanese document no. JP7-9149A is cited to show a prior arc welding method and power supply wherein the metal transfer associated with the method or power supply continuously alternates between a pulse mode and a short-circuiting mode.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through

Art Unit: 1793

Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Roy King, can be reached at 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Clifford C Shaw/  
Primary Examiner, Art Unit 1793

March 27, 2008